INTERMOUNTAIN STATION
Central Reference File
No. 0.73

Research Note

NORTHERN ROCKY MOUNTAIN
FOREST AND RANGE EXPERIMENT STATION

Missoula, Montana

No. 71 January 1949

FOREST SERVICE
RECEIVED
MAR 17 1949
RESEARCH

Christmas Tree Shipments Increase

By

Ben M. Huey

Montana shipped over 3 million Christmas trees in 1948. This reversed the downward trend of last year when a 24-percent decrease to 2-1/2 million trees occurred (Table 1). The production this year nearly equalled the all-time peak of 1946 when 3.3 million trees were cut in the state.

Production increased in nearly every county in 1948 (Table 1). Lincoln and Flathead Counties supplied three fourths of the trees cut this year, a slightly smaller proportion than in previous years. It may be significant that neither of those two counties equalled its 1946 harvest records, whereas, Missoula, Ravalli, Powell, and Granite Counties all surpassed the peak production of two seasons ago.

Table 1. Comparison of number of Christmas trees shipped - 1947-1948 - Montana

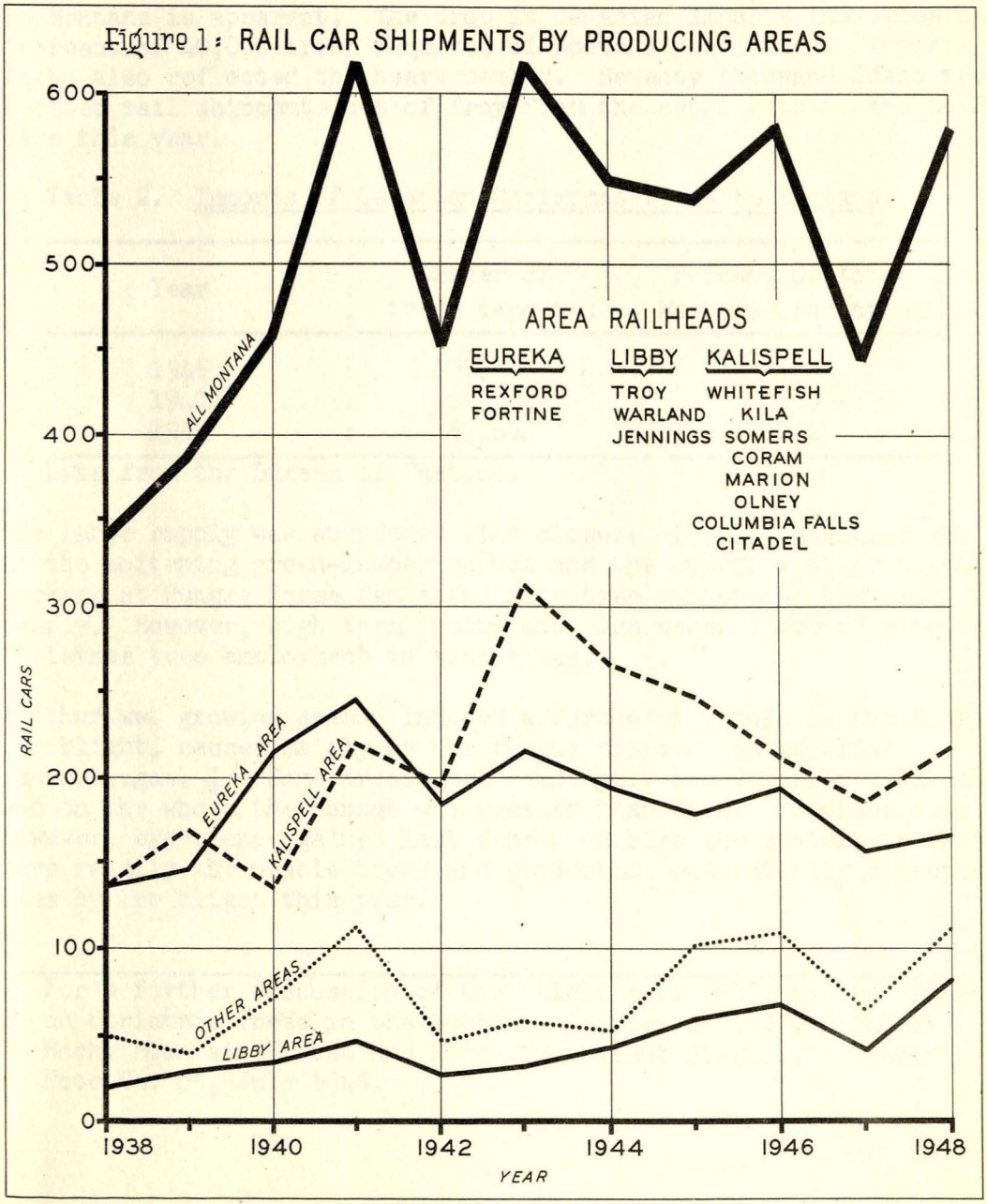
County	1947	1948	Percent of change 1947 to 1948
	- -Number of trees- - -		
Lincoln	1,032,000	1,269,874	+ 23.0
Flathead	1,046,250	1,106,250	+ 5.7
Missoula	143,350	250,000	+ 74.4
Lake	110,000	126,500	+ 15.0
Ravalli	57,500	114,150	+ 98.5
Sanders	51,000	87,900	+ 72.3
Granite	41,750	106,400	+154.8
Mineral	24,000	20,000	- 16.7
Powell	6,300	30,000	+376.2
Other 1/	3,490	11,812	+238.4
Total	2,515,640	3,122,886	+ 24.1

1/ Includes Jefferson, Lewis and Clark, and Cascade Counties.

INT - FILE COPY

Missoula County jumped from fifth place in 1946 to third this year with a 90-percent increase in production over that period. The apparent shifting in production areas shown in Figure 1 may bear out the claims of many shippers that it is becoming more difficult to fill their requirements in the older producing territories. There has been a gradual decline in production in both the Eureka and Kalispell areas in the past five years. Kalispell has taken the lead in production since 1942. It is becoming noticeable that a larger proportion of the total production is coming from other areas, especially Libby, where a steady rise in production of about 10 cars per year has occurred.

Figure 1: RAIL CAR SHIPMENTS BY PRODUCING AREAS



The increase in 1948 production over 1947 seems partly due to the nearly ideal weather conditions during the harvesting season. There were hard frosts before cutting began that "set" the needles. However, for about 10 days in early October the warm days halted some cutters. Snow flurries in early November stimulated buying and resulted in price increases. They added spirit to production without making inaccessible any trees that were already cut.

Part of the strong demand for Montana firs was a reaction to hemlock looper and tussock moth infestations in British Columbia. These defoliating insects threatened production there in addition to the blight. In Table 2 the extent of the decline of imports from across the border to Montana is apparent. The drop in Canadian imports indicates an increase of 40,000 trees required of Montana production. Imports from Idaho also reflected the heavy demand. Seventy thousand Idaho trees boosted rail shipments out of Troy from the usual 2 to 6 cars to 24 cars this year.

Table 2. Imports of Canadian Christmas trees to Montana

Year	Number of trees imported	Percent of total Montana production
1946	107,570	3.3
1947	89,944	3.6
1948	67,664	2.2

Data from the Bureau of Customs.

The labor supply was abundant. The closure of small sawmills due to the softening green-lumber market and the overflow of prospective workers at Hungry Horse Dam added many tree cutters to the usual supply. However, high farm income and high wages competed with Christmas tree employment in some areas.

Another wet growing season induced a further increase in the Douglas-fir blight, caused mainly by the fungus disease, Rhabdocline pseudotsugae. 1/ Some areas were completely removed from utilization and on the whole the damage was greater than in any previous year. However, experience gained last season enabled the cutters to recognize more readily the usable trees and production was actually disrupted less by the blight this year.

1/ For a further discussion of the blight see: What caused "Blight" on Christmas Trees in the Northern Rockies in 1947, Northern Rocky Mountain Forest and Range Experiment Station, Research Note No. 65, July 1948.

Production this year probably came within 5 to 10 percent of satisfying all committed orders. If companies had not limited their orders to what they estimated they could supply, the unsatisfied demand would have been much larger. The most serious deficiency was in the six-foot class trees.

Private land continues to be the major source of Christmas trees from Montana but tree harvesting from public lands is rising. Public lands now supply a quarter of the trees cut in Montana (Table 3). The largest percentage increase in cutting was on federal lands and is mainly traceable to greatly expanded sales on the Flathead National Forest (Table 4). State land production came within .3 percent of equalling its 1946 peak figure. Cutting on federal and private land ranged1.5 and 6.7 percent, respectively, lower than in 1946.

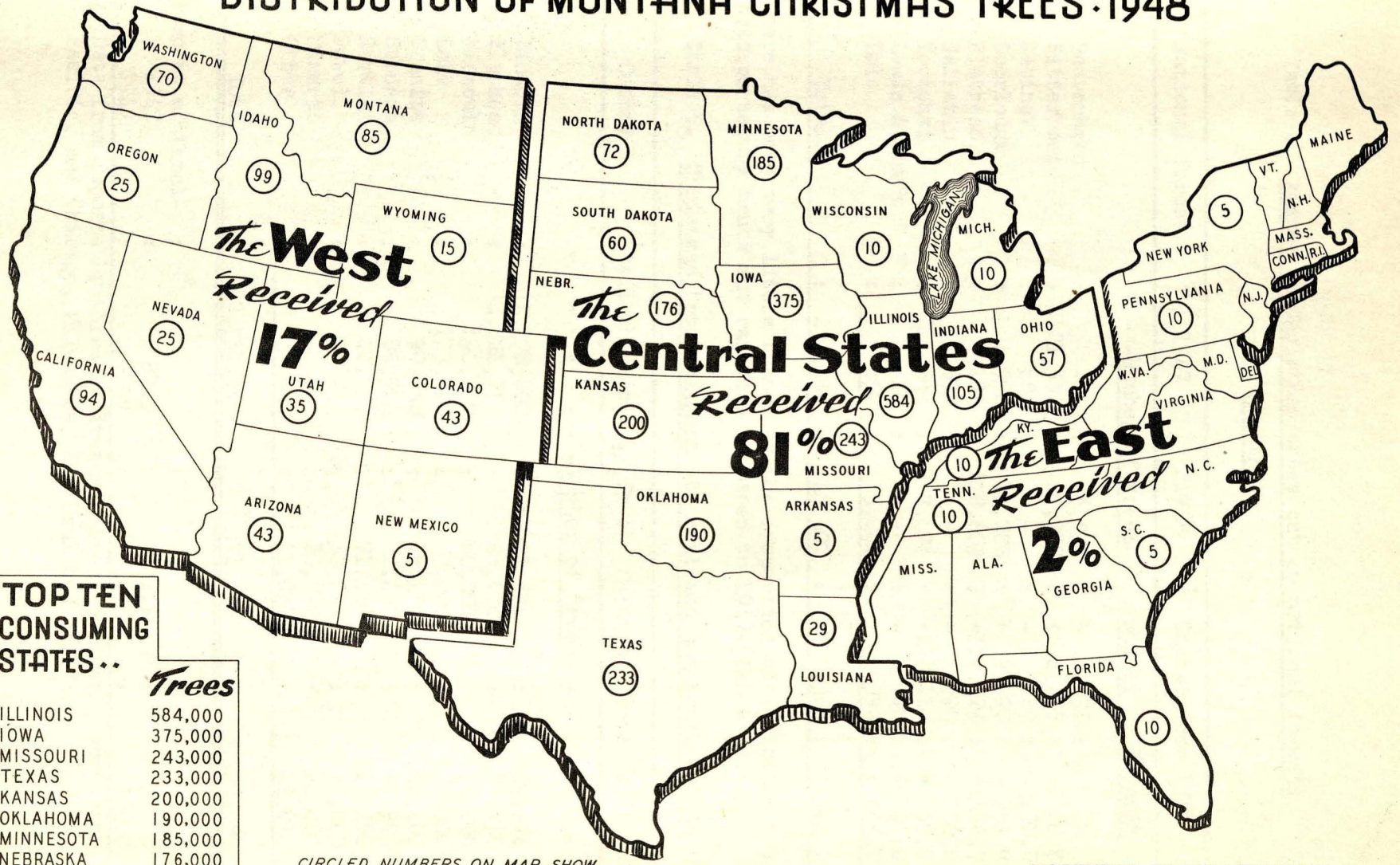
Table 3. Cut of Christmas trees by land ownership groups

Ownership group	Number of trees cut				Increase	
	1947		1948		1947-1948	
	Thousand	Percent	Thousand	Percent	Thousand	Percent
Private	2,099	83.4	2,334	74.8	+235	+ 11.2
Federal	250	10.0	510	16.3	+260	+104.0
State	167	6.6	279	8.9	+112	+ 67.1
All	2,516	100.0	3,123	100.0	+607	+ 24.1

Montana trees were distributed more widely this year than ever before (see map). Rail shipments were routed to the extremities of the Nation, to a total of 33 states, and three cars were sent to Cuba. The central states took over two thirds of the trees with Illinois, Iowa, Missouri, Texas, and Kansas leading and in that order.

More than double the number of trees were cut from national forests this year as compared with the 1947 harvest (Table 4). This year national forests contributed a greater share (16.3 percent) of the total production than has been previously recorded. The Flathead Forest supplied over 15 times as many trees in 1948 as in 1947 to establish an all-time production record for that forest. The Kootenai Forest was an even 100,000 trees under the 1946 figure, but made a 58-percent increase over 1947. All of the national forests that made sales in 1948 recorded increased production over 1947. However, the Cabinet, Gallatin, and Lewis and Clark Forests which sold trees in 1947 did not report any sales this season.

DISTRIBUTION OF MONTANA CHRISTMAS TREES · 1948



TOP TEN CONSUMING STATES..

	Trees
ILLINOIS	584,000
IOWA	375,000
MISSOURI	243,000
TEXAS	233,000
KANSAS	200,000
OKLAHOMA	190,000
MINNESOTA	185,000
NEBRASKA	176,000
INDIANA	105,000
IDAHO	99,000

CIRCLED NUMBERS ON MAP SHOW THOUSANDS OF TREES SHIPPED FROM MONTANA TO RESPECTIVE STATES

NORTHERN ROCKY MOUNTAIN
FOREST AND RANGE EXPERIMENT STATION

DIVISION OF FOREST ECONOMICS

Table 4. Number of Christmas trees cut on national forests

Montana

National forest	1947	1948	Change from 1947	
	Number of trees		Number	Percent
Beaverhead	-	6,536	+ 6,536	-
Bitterroot	21,554	27,757	+ 6,203	+ 28.8
Cabinet	689	-	- 689	- 100.0
Deerlodge	4,998	14,088	+ 9,090	+ 181.9
Flathead	7,475	118,603	+111,128	+1486.7
Gallatin	390	-	- 390	- 100.0
Kootenai	214,363	338,476	+124,113	+ 57.9
Lewis & Clark	40	-	- 40	- 100.0
Lolo	650	5,042	+ 4,392	+ 675.7
Total	250,159	510,502	+260,343	+ 104.1

There has been very little change in the proportion of Christmas trees transported by truck and railroad compared to 1947 (Table 5).

Table 5. Christmas tree shipments by railraod and truck - 1948

County	Rail shipments 1/	Truck shipments	Total shipments
	Number of trees		
Lincoln	1,178,000	91,874	1,269,874
Flathead	1,021,250	85,000	1,106,250
Missoula	190,000	60,000	250,000
Lake	123,500	3,000	126,500
Granite	90,250	16,150	106,400
Sanders	85,500	2,400	87,900
Ravalli	42,750	71,400	114,150
Powell	-	30,000	30,000
Mineral	-	20,000	20,000
Other	-	11,812	11,812
Total	2,731,250	391,636	3,122,886
Percent of total-			
1948	87.5	12.5	100.0
1947	87.9	12.1	100.0

1/ Data from reports by three railroads: Great Northern, Northern Pacific, and Chicago, Milwaukee, St. Paul and Pacific.